

IN THE CLAIMS:

Claim 1 (canceled)

Claim 2 (currently amended) A synchronous induction motor as claimed in claim ~~1~~ 3 or claim 4, wherein said range equal to or less than 10% is set to electrical angles of 0-10 degrees and 170-180 degrees.

Claim 3 (currently amended) A synchronous induction motor ~~as claimed in claim 1 or 2~~ comprising:

a stator provided with a stator winding;

a rotor rotating within said stator;

a cage-type secondary electric conductor provided in a peripheral portion of a rotor yoke portion constituting said rotor; and

a permanent magnet inserted into the rotor yoke portion and having a two-pole structure, wherein the magnetomotive force generated by one pole of said rotor is set to a value equal to or less than 10% of a peak value in a predetermined range at a non-continuous portion of a waveform of the magnetomotive force near an electrical angle of 0 degrees or 180 degrees, and

wherein the magnetomotive forces generated by said rotor in ~~the other~~ a range of the electrical angle other than said range equal to or less than 10 % are distributed in a sine wave shape.

Claim 4 (currently amended) A synchronous induction motor ~~as claimed in claim 1 or 2~~
comprising:

a stator provided with a stator winding;

a rotor rotating within said stator;

a cage-type secondary electric conductor provided in a peripheral portion of a rotor yoke
portion constituting said rotor; and

a permanent magnet inserted into the rotor yoke portion and having a two-pole structure,

wherein the magnetomotive force generated by one pole of said rotor is set to a value
equal to or less than 10% of a peak value in a predetermined range at a non-continuous portion of
a waveform of the magnetomotive force near an electrical angle of 0 degrees or 180 degrees, and

wherein the magnetomotive forces generated by said rotor in ~~the other~~ a range of the
electrical angle other than said range equal to or less than 10% are distributed in a step-like
chevron shape having two or more steps ~~or more~~.

Claim 5 (currently amended) A synchronous induction motor as claimed in claim ~~1, 2, 3~~
or claim 4, wherein the synchronous induction motor is mounted on a compressor.